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10/582,923	10/10/2008	Christoph Becke	2003P01918WOUS	9209

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EXAMINER
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ROHRHOFF, DANIEL J

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3637

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ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/582,923  
Filing Date: October 10, 2008  
Appellant(s): BECKE ET AL.

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Andre Pallapies  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 12/12/11 appealing from the Office action mailed 9/2/11.

**(1) Real Party in Interest**

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The following is a list of claims that are rejected and pending in the application:

Claims 1-10 are cancelled. Claims 11-30 are currently pending and rejected.

**(4) Status of Amendments After Final**

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

**(5) Summary of Claimed Subject Matter**

The examiner has no comment on the summary of claimed subject matter contained in the brief.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the

subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

**(7) Claims Appendix**

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

**(8) Evidence Relied Upon**

2003/0122455	Caldwell	7-2003
2003/0086474	Hammarth et al.	5-2003
5,738,442	Paron	4-1998
2003/0222044	Maritan et al.	12-2003

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 102***

Claims 11-13, 15, 21-23 & 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Caldwell (US patent application publication 2003/0122455).

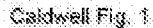
Regarding claim 11, Caldwell discloses a chilled goods support (11) for a cooling device comprising a liquid crystal temperature display (233), wherein a supporting element (22) of the chilled goods support acts as a thermal buffer to which the liquid crystal temperature display unit is fixed in a planar manner (Fig. 3A).

Regarding claim 12, Caldwell discloses a chilled goods support wherein the thermal buffer is formed by a frame (22) mounted on a plate (20) of the chilled goods support.

Regarding claim 13, Caldwell discloses a chilled goods support wherein the liquid crystal temperature display unit is attached to an outer side of the frame oriented obliquely to the plate (Fig. 3A).

Regarding claim 15, Caldwell discloses a chilled goods support wherein the frame is injection molded on the plate in one piece (¶ 26).

Regarding claim 21, Caldwell discloses a refrigerator comprising: a housing (100) having side walls (Fig. 1) and a compartment (see annotated Fig. 1) disposed within the housing; a door (Fig. 1) coupled to the housing for opening and closing the compartment; a chilled goods support (11) for supporting goods within the compartment and at least partially defining a region within the compartment (Fig. 1), the chilled goods support extending between the side walls and including a front edge (see annotated Fig. 1) facing the door and having a downwardly sloping surface (Fig. 1); and a liquid crystal temperature display unit (233) disposed on the sloping surface of the chilled goods support indicating the temperature within the region (Fig. 3A), wherein a supporting element (22) of the chilled goods support acts as a thermal buffer to which the liquid crystal temperature display unit is fixed in a planar manner (Fig. 3A).



Regarding claim 28, Caldwell discloses a refrigerator further comprising multiple chilled goods supports (11-13) at least partially defining corresponding regions (Fig. 1) above each chilled goods support, each chilled goods support including a front edge (see annotated Fig. 1) with a downwardly sloping surface and a liquid crystal temperature display unit (233) disposed on the sloping surface, the temperature display unit indicating the temperature within the corresponding region (Fig. 3A), wherein a supporting element (22) of each of the multiple the chilled goods supports acts as a

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thermal buffer to which its liquid crystal temperature display unit is fixed in a planar manner (Fig. 3A)

***Claim Rejections - 35 USC § 103***

Claims 14 & 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caldwell.

Regarding claim 14, Caldwell discloses the chilled goods support as claimed. Caldwell does not disclose a chilled goods support wherein a portion of the frame which supports the liquid crystal temperature display unit is an extruded profile. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Caldwell wherein a portion of the frame which supports the liquid crystal temperature display unit is an extruded profile. The claim is a product by process claim and the support does not depend on the process of making it. The product by process limitation "wherein a portion of the frame which supports the liquid crystal temperature display unit is an extruded profile" would not be expected to impart distinctive structural characteristics to the support. Therefore the claimed support is not different and unobvious from the support of Caldwell.

Regarding claim 16, Caldwell discloses the chilled goods support as claimed. Caldwell does not disclose a chilled goods support wherein the liquid crystal temperature display unit is back-molded with the supporting element. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Caldwell wherein the liquid crystal temperature display unit is back-molded with the supporting element. The claim is a product by process claim and the support does not

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depend on the process of making it. The product by process limitation "wherein the liquid crystal temperature display unit is back-molded with the supporting element" would not be expected to impart distinctive structural characteristics to the support. Therefore the claimed support is not different and unobvious from the support of Caldwell.

Claims 17 & 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caldwell in view of Hammarth et al. (US patent application publication 2003/0086474) (hereinafter Hammarth).

Regarding claim 17, Caldwell discloses the chilled goods support as claimed. Caldwell does not disclose a chilled goods support wherein the liquid crystal temperature display unit is divided into a plurality of discrete elements, each of the discrete elements having a different color change temperature at which that element changes color. Hammarth teaches a liquid crystal temperature display unit which is divided into a plurality of discrete elements (10, 12, 14, 16 & 18), each of the discrete elements having a different color change temperature at which that element changes color (§ 15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the liquid crystal temperature display of Caldwell wherein the display unit is divided into a plurality of discrete elements, each of the discrete elements having a different color change temperature at which that element changes color as taught by Hammarth, since it would have replaced one known liquid crystal temperature

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display with another known liquid crystal temperature display and displayed whether or not the temperature fell within an optimum range or above or below the optimum range.

Regarding claim 24, Caldwell discloses the refrigerator as claimed. Caldwell does not disclose a refrigerator wherein the liquid crystal temperature display unit is divided into a plurality of discrete elements that change color in response to the temperature within the region. Hammarth teaches a liquid crystal temperature display unit which is divided into a plurality of discrete elements (10, 12, 14, 16 & 18) which change color in response to the temperature within the region (§ 15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the liquid crystal temperature display of Caldwell wherein the display unit is divided into a plurality of discrete elements which change color in response to the temperature within the region taught by Hammarth, since it would have replaced one known liquid crystal temperature display with another known liquid crystal temperature display and displayed whether or not the temperature fell within an optimum range or above or below the optimum range.

Claims 18-20 & 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caldwell in view of Paron et al. (US patent 5,738,442) (hereinafter Paron).

Regarding claims 18 & 26, Caldwell discloses the chilled goods support as claimed. Caldwell does not disclose a chilled goods support wherein the liquid crystal temperature display unit comprises a display zone in which a transition zone is continuously movable between a low-temperature color and a high-temperature color

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depending on temperature. Paron teaches a liquid crystal temperature display unit comprising a display zone (18) in which a transition zone is continuously movable between a low-temperature color and a high-temperature color depending on temperature (Col. 2: 42-52 & abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the liquid crystal temperature display of Caldwell wherein the display unit comprises a display zone in which a transition zone is continuously movable between a low-temperature color and a high-temperature color depending on temperature as taught by Paron, since it would have replaced one known liquid crystal temperature display with another known liquid crystal temperature display and displayed where the temperature fell within an optimum range

Regarding claims 19 & 27, Caldwell, as modified, teaches a chilled goods support wherein reference marks (Paron: 14) are formed on the supporting element adjacent to the display zone.

Regarding claim 20, Caldwell, as modified, teaches a chilled goods support wherein the cooling device comprises an interior enclosed by a heat-insulating housing (Fig. 1).

Claims 25 & 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Caldwell in view of Hammarth and Maritan et al. (US patent application publication 2003/0222044) (hereinafter Maritan).

Regarding claim 25, Caldwell, as modified, teaches the refrigerator as claimed. Caldwell, as modified, does not teach a refrigerator wherein the color of the liquid

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crystal temperature display unit indicates a type of chilled good that is suitable to be stored on the chilled goods support. Maritan teaches a refrigerator with a support with a display which indicates a type of chilled good that is suitable to be stored on the support (¶ 23). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the display of Caldwell wherein the color of the display indicates a type of chilled good that is suitable to be stored on the support as taught by Maritan, since it would have indicated what shelf was appropriate for storage of a specific good.

Regarding claim 29, Caldwell teaches a refrigerator comprising: a housing (100) having side walls (Fig. 1) and a compartment (see annotated Fig. 1) disposed within the housing; a door (Fig. 1) coupled to the housing for opening and closing the compartment; a plurality of chilled goods supports (11-13) extending between the side walls and spaced vertically apart from one another within the compartment (Fig. 1), each chilled goods support at least partially defining a corresponding region above the respective chilled goods support and including a front edge (see annotated Fig. 1) with a downwardly sloping surface (Fig. 1); a liquid crystal temperature display unit (233) disposed on the downwardly sloping surface of each chilled goods support indicating the temperature within the corresponding region (Fig. 1), wherein a supporting element (22) of each of the plurality of chilled goods supports acts as a thermal buffer to which the liquid crystal temperature display unit is fixed in a planar manner (Fig. 3A).

Caldwell does not disclose each liquid crystal temperature display unit changing color in response to the temperature within the corresponding region wherein the color

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of the liquid crystal temperature display unit indicates a type of chilled good that is suitable to be stored on that respective chilled goods support.

Hammarth teaches a liquid crystal temperature display unit changing color in response to the temperature (§ 15). Maritan teaches a support with a display which indicates a type of chilled good that is suitable to be stored on the support (§ 23). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the display of Caldwell wherein each display unit changes color in response to the temperature within the corresponding region as taught by Hammarth and wherein the color of the display indicates a type of chilled good that is suitable to be stored on the support as taught by Maritan, since it would have indicated what shelf was appropriate for storage of a specific good.

Regarding claim 30, Caldwell, as modified, teaches a refrigerator wherein at least one of the chilled goods supports includes a plate (20) formed from a glass material and a frame (22) extending around the perimeter of the plate and being formed from a plastic material injection molded on the plate in one piece (§ 26).

#### **(10) Response to Argument**

Regarding Appellant's argument that Caldwell does not disclose, or even suggest, a supporting element of a chilled goods support acting as a thermal buffer for a temperature display unit because there is no passage in Caldwell that discusses a thermal buffer for the display, the examiner disagrees. The examiner maintains that frame 22 acts as a thermal buffer to which the liquid crystal temperature display 233 is fixed. Paragraph 26 states the frame can be molded, which is immediately recognized

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by persons of skill in the art as indicating that the frame is made from a plastic. An intrinsic property of plastic is that it can absorb or dissipate heat; therefore the frame is inherently acting as a thermal buffer for the display.

Additionally, the claim limitation “acts as a thermal buffer” is an intended use of the claimed supporting element and a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. The frame 22 of Caldwell is capable of acting as a thermal buffer to the display unit because the display unit is mounted to the frame and the frame acts a buffer between the display and the load surface 20. While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. (MPEP 2114)

The office action identified the shelf frame 22 to be the claimed supporting element acting as a thermal buffer to the display. Since applicants disclosure teaches the frame of a refrigerator shelf to act as a thermal buffer and Caldwell also teaches a structurally similar frame of a refrigerator shelf with a display mounted to itself, it is apparent from reading both applicants disclosure and Caldwell’s disclosure that the frame of Caldwell is capable of acting as a thermal buffer and the rejection is proper.

Regarding Appellant’s argument that the office action does not comply with 37 CFR 1.104(c)(2) because it does not make it apparent as to how the frame of Caldwell was acting as a thermal buffer for the display unit and the next office action should not

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be made final, this argument is not appropriate in an appeal as it is a petitionable matter.

Claim 16

Regarding Appellant's argument that Caldwell does not teach or suggest the claimed back molding, the examiner disagrees. The claim is a product by process claim and the claimed process does not provide a structural distinction between the claimed invention and Caldwell because there is no structure implied by the process. Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself (MPEP 2113).

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**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/DANIEL ROHRHOFF/

Examiner, Art Unit 3637

1/4/2012

/Darnell M Jayne/

Supervisory Patent Examiner, Art Unit 3637

Conferees:

Darnell Jayne /dj/

Janet Wilkens/jw/